

1.0 PURPOSE AND NEED FOR THE ACTION

1.1 Purpose of the Study and the Draft EIS

This draft environmental impact statement (draft EIS) reports the studies and coordination conducted to determine whether the Federal Government should participate in navigation improvements in Northwest Alaska. The U.S. Army Corps of Engineers (Corps) also has prepared the Navigation Improvements, DeLong Mountain Terminal, Alaska, draft Interim Feasibility Report (draft feasibility report), which will be reviewed concurrently with the draft EIS. The feasibility report and EIS together, along with supporting appendices and documentation, may be revised and submitted to the Assistant Secretary of Defense for approval and then to Congress, where navigation improvements may be authorized and funded.

The Corps initiated navigation studies at the direction of Congress and with the sponsorship of the Alaska Industrial Development and Export Administration (AIDEA) to look for ways to reduce costs and risks associated with loading zinc and lead ore concentrate produced at the Red Dog Mine. The present system of loading ore concentrate into barges and then transferring it into bulk carrier ships moored offshore is expensive and does not allow the concentrate to be loaded during adverse sea conditions. Conditions that prevent loading of ore concentrate are typically present about 25 percent of each shipping season. As the Corps explored this problem, other transportation problems and needs in Northwest Alaska were identified and the purpose and scope of the study were adjusted to consider those needs.

The United States Environmental Protection Agency (EPA) joined the Corps as a cooperating agency as data were being collected and alternatives began to emerge. EPA and the Corps, in their first meeting, developed a joint statement of purpose and need, which is as follows:

Develop navigation and port facilities to best serve the region's current and future mineral extraction and other transportation needs, as well as the long-term economic base while minimizing impacts on subsistence resources, Alaska Native culture, and the environment.

This statement remains the central planning objective in studies for this potential action.

Within this broad purpose, the Corps of Engineers is authorized to study navigation improvements in Northwest Alaska and to recommend a navigation project to Congress. The scope of Federal actions addressed by this study is limited to navigation improvements that could meet criteria established by Federal water resources development principles and guidelines. Alternatives to those potential navigation improvements, including alternatives outside Corps authorities, also are evaluated to determine whether they also might effectively meet navigation-related needs.

Initial phases of this study considered a wide range of potential navigation improvements, but focused mainly on actions that would more efficiently transport ore concentrate and

fuel. Navigation improvements that might be constructed under existing authorities could include channels and maneuvering areas, breakwaters, and other features to reduce waves or allow vessels safer and more efficient use of waters of the United States. The Federal authority to conduct the studies and the purpose of the studies is defined in considerable detail in the draft feasibility report and in the appendixes to that report. The draft feasibility report and appendixes are incorporated by reference into this draft EIS.

Principal economic needs identified early in the planning process were related to improving regional transportation systems and reducing transportation costs. Other non-economic needs were identified as data were gathered and during agency and public scoping. The transportation needs related to Federal authority for this study are summarized as follows:

- Reduce ore concentrate loading costs;
- Reduce or minimize release of ore concentrates and potential for spills of fuel and ore concentrate
- Reduce fuel transportation costs by providing facilities that can receive less expensive fuel from tanker ships
- Provide facilities that reduce costs of regional fuel distribution, and
- Provide flexibility for future needs

The remainder of this section further defines those transportation needs, develops goals and objectives to meet those needs, and identifies the resources and concerns that should be considered in the evaluation of potential Federal actions. Later in this section and in the initial evaluation of alternatives in Section 2 (Alternatives), those needs and objectives are redefined and some are eliminated from consideration in this study.

1.2 Project Location and Setting

The principal industrial activity in Northwest Alaska is the mining and processing of zinc and lead ore from the Red Dog Mine and the transportation of ore concentrate from the mine. Figure 1-1 shows the location of Red Dog Mine and Portsited, where ore concentrate from the mine is transferred as bulk cargo to ships for transportation to smelters.

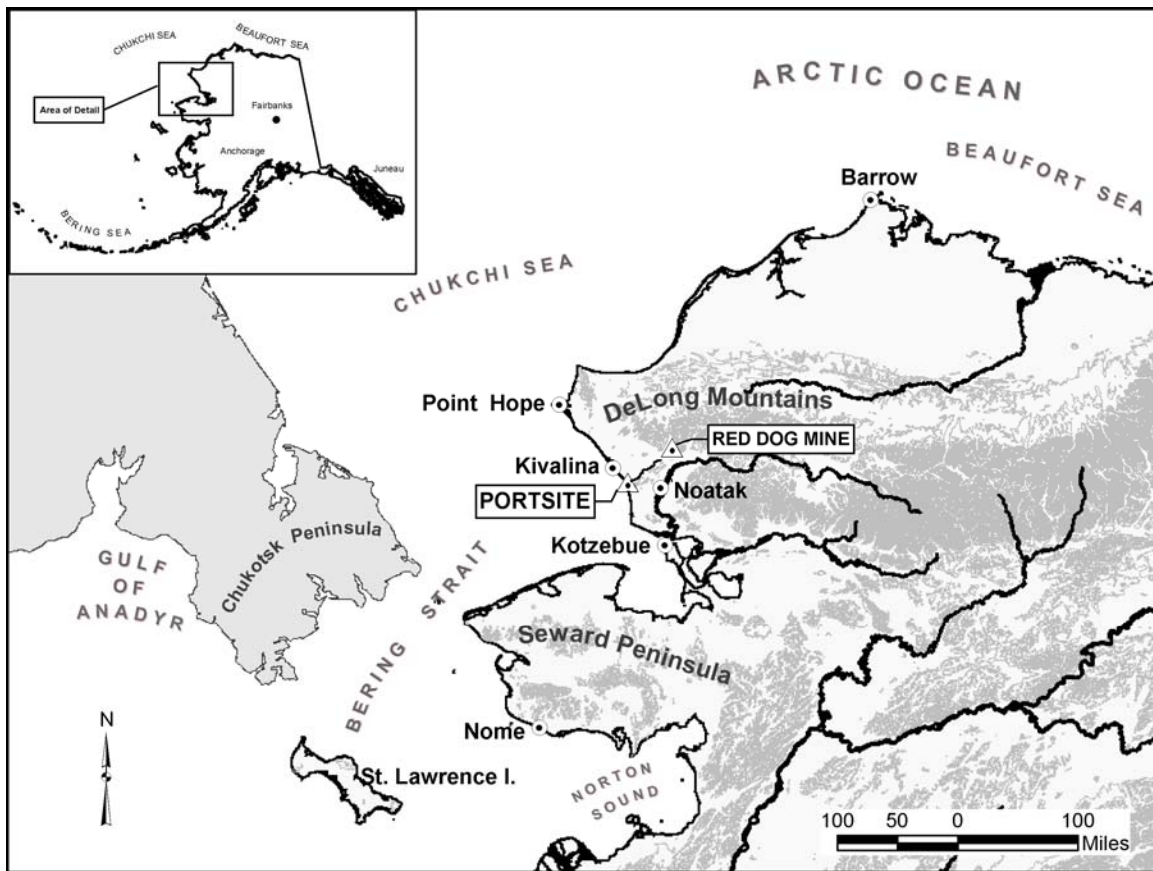


Figure 1-1. Location of Portsite and Red Dog Mine.

Portsite is not an incorporated community, and the name Portsite was locally generated as a convenient way to refer to the site. The site name is not recognized by Federal mapping agencies and typically does not appear on regional maps. Portsite has no permanent population; the people at Portsite are employed in mining-related activities. In this draft EIS, “Portsite” refers to the location of the existing facilities that load ore concentrate from Red Dog Mine. The existing facilities at Portsite, including the loader, storage buildings, generators, housing, and other structures are referred to as DeLong Mountain Terminal (DMT). The DMT facilities, along with the 55 miles of road that support transportation around Red Dog mine and between the mine and Portsite are referred to as the DeLong Mountain Transportation System (DMTS).

The land at Portsite is owned by NANA Development Corporation, an Alaska regional Native corporation incorporated pursuant to the Alaska Native Claims Settlement Act of 1971. The DMTS is owned by AIDEA, which is owned by the State of Alaska. Other facilities and equipment at Portsite are owned by Teck-Cominco Alaska (TCAK). TCAK also operates the Red Dog Mine, about 52 miles from Portsite, under an agreement with NANA, and NANA operates the facilities at Portsite under agreements with AIDEA. The AIDEA Portsite facilities are available to other industrial users, but only TCAK uses them at this time.

The open pit Red Dog Mine extracts zinc and lead ores from extensive ore bodies and produces more zinc than any other mine in the world. Four major ore bodies are immediately available for ongoing mining operations. TCAK and NANA estimate that those ore bodies will support present levels of production for about 35 more years. Other ore bodies nearby in the DeLong Mountain Mining District would support many more years of production.

Chapter 3 of this draft EIS, the draft interim feasibility report, and the Economics and Hydrology appendixes to the feasibility report all provide more detailed information about Red Dog Mine, Portsited, and their facilities and operation. The evaluation of alternatives in Chapter 2 indicates that if Federal navigation improvements are constructed under existing authorities, they will be at Portsited; therefore, the draft EIS pays particular attention to conditions there. Figure 1-2 shows Portsited and its principal features.

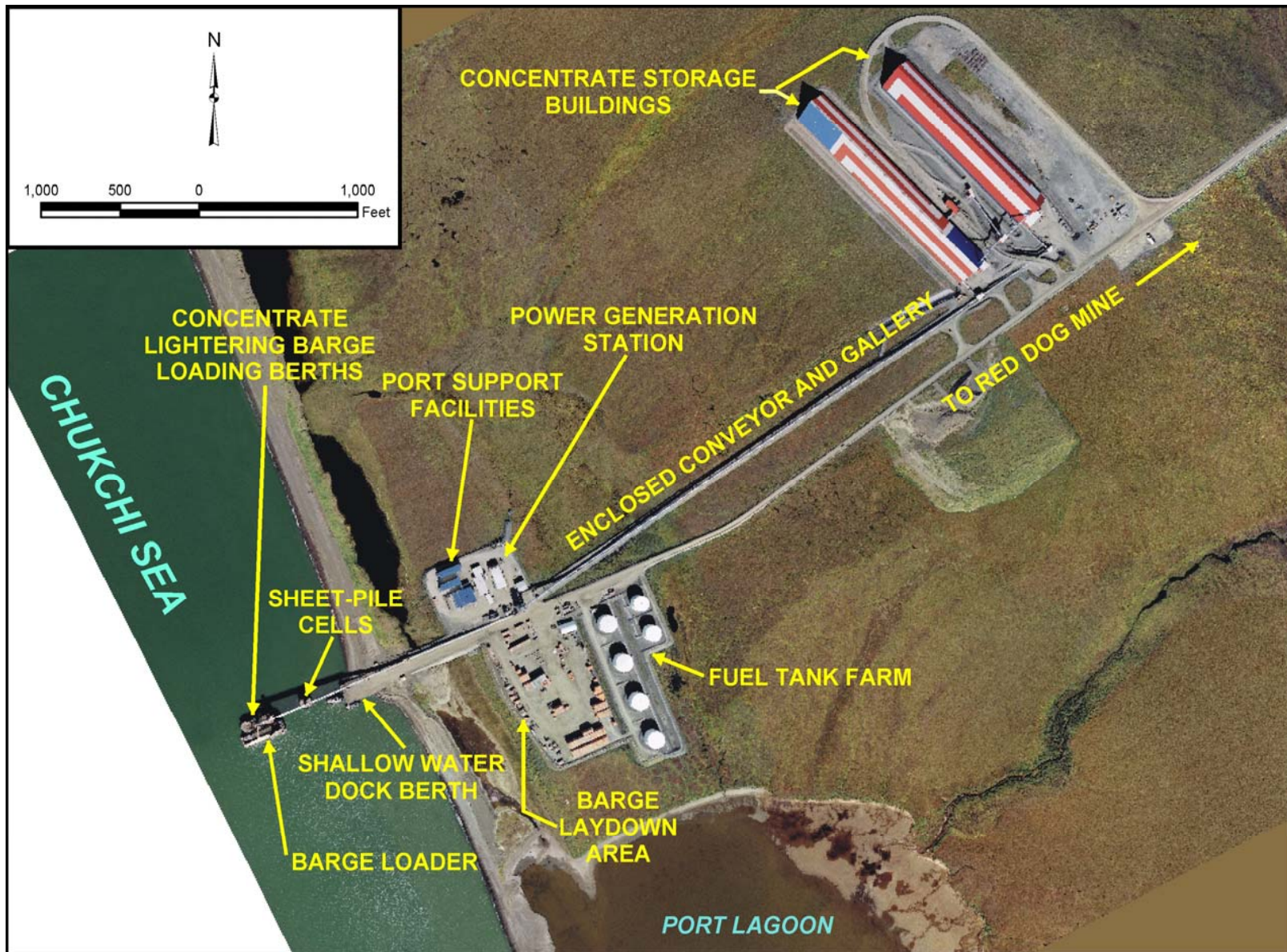


Figure 1-2. Principal Facilities at Portsite.

Major features and activities at Portsite are as follows:

- Open-sea anchorage 3 to 5 miles offshore in water 50 to 72 feet deep for vessels as large as Panamax-class bulk carriers.
- Two, self-discharging, lightering barges (the *Kivalina* and the *Noatak*) each transport 5,444 wet metric tonnes (6,000 wet short tons) per trip of ore concentrate from Portsite to the bulk carriers moored offshore.
- Seasonal barge moorings, consisting of single-can buoys, secured with conventional chain and anchor systems, are located offshore of Portsite. When wind and/or wave conditions become severe, the barges are moved to the buoys for safety.
- Four tugs move the self-discharging barges and assist in loading operations. In normal operations, one tug is with each barge, a third pulls the stern of the ship to create a lee for the lightering barge, and the fourth is used as a helper to position barges at the ship, move barges into and away from the berths, and for crew support.
- A barge loader with two berths in water about 20 feet deep loads ore concentrate into the two self-discharging lightering barges. The loader face is about 700 feet off shore.
- A single, 2,000 ton-per-hour barge loader transfers ore concentrate from the loading dock into the self-discharging lightering barges.
- A shallow-water barge dock (water is 12 to 15 feet deep at its seaward face) for general cargo is composed of a sheet-pile bulkhead extending 280 feet from shore. In calm weather, the dock is used to berth the lightering tugs and for launching the spill response boat and other small craft.
- Two 74-foot-diameter sheet-pile cells support an enclosed conveyor and gallery. The conveyor moves concentrate from onshore storage facilities to the loader. The conveyor and gallery span the 420 feet from the face of the sheet-pile shallow water dock to the loader. The enclosed gallery extends another 1,200 feet landward from the sheet-pile wall to the surge bin.
- Various independent tugs and barges deliver fuel and commodities needed to support mining and shipping operations.

Manifolds on the south side of the first and the second sheet-pile cells transfer fuel from barges through a 12-inch-diameter pipeline directly to onshore storage tanks. When each fuel barge is berthed, both the south-side concentrate berth and the shallow-water dock berth are not usable by other vessels, but concentrate can be loaded on the north berth.

Principal upland facilities at the port are: two concentrate storage buildings, which together can store more than 1 million tons of ore concentrate; the fuel tank farm, with a total storage capacity of about 14.5 million gallons in six 2.4-million-gallon tanks; four electrical generators with total capacity of about 3.2 megawatts, a barge lay-down area, and other port support facilities that include maintenance shops, a personnel accommodations complex, port office, construction camp facilities, sewage treatment plant, roads, materials handling systems, and materials storage areas. Altogether, the footprint of the buildings and other facilities at Portsite occupies or encloses about 126 acres.

1.2.1 Regional Transportation and Transportation Needs

The population of Northwest Alaska is sparse and scattered, and the transportation system is limited. Communities are not connected by roads, electrical generation systems are not interconnected, and transportation can be expensive for both people and goods.

State, Federal, and regional planning agencies and committees have looked at a broad range of land, sea, and air transportation alternatives that might lower the cost of travel and the cost of goods delivered to the region. State and Federal aviation agencies are in an aggressive program to construct and improve airstrips and associated facilities across rural Alaska. This program will improve safety and reliability, but will not do much to lower costs of shipping bulk goods. Roads could lower costs of transporting goods to smaller communities, but would do little to lower costs of transporting fuel and other bulk commodities into the region unless the roads were connected to the highway system. Roads may eventually interconnect communities in Northwest Alaska, and roads or railroads may someday reach to the national highway system. Land ownership and protected land status, difficult terrain, environmental and social concerns, and costs of construction and maintenance all present problems that must be resolved before a regional road system could be constructed. There are no firm plans to construct a regional road system or other land transportation system in the foreseeable future.

Ore concentrate from the Red Dog Mine is hauled to Portsitem by 130-ton trucks over a heavy-duty, mostly unpaved road about 52 miles from Red Dog mine to DMT facilities at Portsitem, where it is stored until the open-water season, which usually begins in late June or early July. During the open-water season, stored concentrate is loaded onto barges that are towed by tugs to ships waiting 3 to 5 miles offshore, where the barges transfer the concentrate to the ships. During most of the loading cycle, two barges and three tugs with crews are required to load each ship. Transfer costs are high, but might be substantially reduced if ore concentrate could be loaded directly into bulk cargo ships. This reflects one project objective: *Reduce ore concentrate loading costs.*

About 250 barge trips are required to transfer ore concentrate to bulk cargo ships each year. Ore concentrate spilled during the double transfer process, noise from tug operation, and risk of fuel and concentrate spills from barge or tug accidents are all potential environmental impacts that might be reduced by a navigation improvements project. This is reflected in the following project objective: *Reduce the release of ore concentrates and the potential for spills of fuel and ore concentrate.*

Ocean-going barges that land at Portsitem currently transport fuel, mining and transportation equipment, and many of the commodities that support the work force. These materials are then hauled to the mine by truck. Many of the commodities landed at Portsitem would arrive by barge even if there were deeper moorage at Portsitem, but fuels could be delivered at substantially lower costs if ships could transfer fuel directly into existing storage tanks at Portsitem. The cost savings could be enough to reduce fuel transportation costs to much of northern and northwestern Alaska. This reflects the following project objective: *Reduce fuel transportation costs by providing facilities that can receive fuel from tanker ships.*

The road between Portsie and Red Dog Mine, like the facilities at Portsie, is owned by AIDEA and is part of the DeLong Mountain Transportation System (DMTS). The DMTS road is constructed on State land, land owned by the NANA Development Corporation, and on lands of the Cape Krusenstern National Monument.

The DMTS road, the mine, and Portsie are not connected to any other road or road system, or any community. Everything that comes into or leaves Portsie or the mine is transported by sea through facilities at Portsie or through the airstrip at Red Dog Mine. To get to Portsie, passengers first fly to the mine airstrip, about 650 miles from Anchorage on TCAK's weekly chartered air carrier (currently a Boeing 737) or fly about 80 miles from Kotzebue by chartered or scheduled light aircraft. Vans and trucks shuttle people from the mine to Portsie over the DMTS road. People in the region can get to the area around the mine by snowmachine in the winter and to Portsie by snowmachine or boat, although visiting is not encouraged. There are no commercial accommodations for visitors at Portsie or the mine.

There are no deep-water ports on the western coast of continental Alaska north of the Alaska Peninsula. Coastal waters are shallow along almost the entire length of the coast from Bristol Bay north and east to the Canadian border. Fuel and other bulk goods are shipped in barges shallow enough in draft to land in available ports, or cargo is transferred to shore in lightering barges. A major part of the bulk material shipped to western Alaska is fuel, which is barged from Puget Sound, Washington or Cook Inlet, Alaska. If a port or other facility could be developed in the region to unload fuel or other bulk goods directly from deep-draft vessels, then transportation costs for fuel and other goods might be lowered in northwestern Alaska. In addition to the anticipated benefits, the presence of such a port would provide the flexibility needed to adapt to future needs that are not yet anticipated. This reflects the following project objective: *Provide flexibility for future needs.*

1.3 Study Purpose and Draft EIS Purpose and Content

1.3.1 Draft EIS Purpose

This draft EIS analyzes the impacts of constructing navigation improvements at Portsie on the coast of the Chukchi Sea about 65 air miles North of Kotzebue (figure 1-1) to provide safer and more economical shipping for Northwest Alaska. The draft EIS also considers alternative shipping modes and locations for navigation improvements, as required by Corps planning regulations and Council on Environmental Quality regulations. The draft EIS focuses primarily on two sets of alternatives: (1) the alternative of no Federal action, which would leave future transportation development to others, and (2) alternatives that might qualify for joint Federal and non-Federal funding under authority of the 1986 Water Resources Development Act (WRDA), as amended, and guidance for implementing the Act. Navigation projects constructed under WRDA must satisfy national economic development criteria. The studies for WRDA projects are jointly funded by the Federal government and by a non-Federal partner. Federal and non-Federal entities also share construction and operation costs of WRDA projects.

The National Environmental Policy Act (NEPA) (42 USC 4341 *et seq.*) requires Federal agencies to consider the environmental effects of proposed Federal actions and alternatives to those actions. The Council on Environmental Quality and U.S. Army Corps of Engineers

(Corps) regulations (ER 1105-2-100) provide guidance for developing and evaluating information to meet NEPA requirements. Corps regulations and Principles and Guidelines developed for implementing WRDA and NEPA also guide the preparation of feasibility studies intended to provide engineering, plan formulation, economic, and other data to the public, agency decision makers, and Congress. Those regulations also govern preparation of EIS's that parallel the feasibility report, but focus on environmental issues. This DeLong Mountain Terminal draft EIS was prepared to meet NEPA requirements and Corps regulations as established in Engineering Regulation (ER) 200-2-2, which implements Council on Environmental Quality regulations (40 CFR 1500-1508). The analysis in the draft EIS relies heavily on material in the DeLong Mountain Terminal Navigation Improvements, Alaska draft feasibility report and its appendixes. As part of the NEPA analysis, this draft EIS also considers alternative actions that meet the project purpose, including non-Federal actions, that could be recommended to Congress.

EIS's are prepared to provide information to Federal decision makers and to other interested people. A draft EIS is released for public review first so that people interested in the action can comment and add information. The draft EIS is reissued or amended as a final EIS and released for a second public review. After the second public review, the final EIS, public comments, and a proposed decision document are sent to Federal decision makers. The decision maker for the proposed Federal action would be the chief of the U.S. Army Corps of Engineers. The Regional Director for the U.S. Environmental Protection Agency (EPA), Region 10, also could be a decision maker if the EPA decided to designate an ocean disposal site based on the DeLong Mountain Terminal EIS.

1.3.2 Scope of the Draft EIS

Water resources development feasibility studies and EIS's must examine the no-action alternative and a full range of alternatives that could meet the broadly stated need for the action. In the context of the DeLong Mountain Terminal studies, the draft EIS must examine alternatives for fuel and ore concentrate transportation facilities and the alternative of no Federal action. The draft EIS also must examine secondary and cumulative effects that might result from a Federal project, and those effects must be considered in Federal decision making.

Navigation studies evolve as information is gathered and plan formulation progresses. During early scoping and plan formulation, the Corps expected potential expansion in mine production to be a significant factor that would support economic need for navigation improvements at Portsitem. As the study progressed, it was found that: (1) there is not much economic incentive to increase mining at this time and, (2) the savings that would result from cheaper transportation from a Federal project would be valuable, but would not be enough to induce a wave of new or increased mine production. This means that, while mining is likely to continue and to expand into new areas, navigation improvements would not do much to "open the door" for major new mining in Northwest Alaska. There are plans to open additional deposits at the Red Dog Mine, but that would happen as part of the anticipated evolution of the mine with or without the Federal project. Section 4.12 in the Environmental Consequences section of this draft EIS contains more discussion about how navigation improvements might affect development in northwestern Alaska.

At the beginning of Federal participation in studies for this draft EIS, the Corps looked at the possibility of constructing an airport at Portsite to transport fuel to communities in Northwest Alaska. As the study progressed, it became clear that the economic benefits from transporting fuel by air would not be enough to justify the expense of constructing and operating an airport for that purpose.

While air transport of fuel would not justify the expense of an airport at Portsite, existing fuel storage capacity at Portsite could be used to store less expensive fuel received from ocean-going tankers. That fuel could, in turn, be used to operate the port and Red Dog Mine. It also could be transported by barge to other communities in western and northwestern Alaska. This could produce National Economic Development benefits as defined by Federal water resource development criteria by lowering fuel transportation costs in Northwest Alaska.

Meeting the need for better facilities to export ore concentrate and the need for cheaper fuel transportation could generate economic benefits and could be the basis for Federal cost-sharing participation in navigation improvements in Northwest Alaska. The Economics Appendix explores transportation needs and examines economic benefits that could result from various navigation improvement alternatives that might be constructed.

Data presented in the Economics Appendix of the draft feasibility report show that diesel fuel and gasoline could be purchased from the world market and delivered to Portsite for about \$0.21 per gallon less than the present cost. With current shipping costs, that fuel could be barged to many users on the coast and rivers of northwestern and western Alaska at less cost than for delivery from the present distribution systems. The greatest benefits would result from barging fuel to nearby communities, and would diminish with distance. Figure 1-3 shows the approximate area where the total cost of fuel transportation would be reduced as compared with present costs. More detailed information is presented in the Economics Appendix. Savings in fuel transportation costs would be passed on to consumers in a fully efficient market, but this might not always be the case in western and northwestern Alaska, where competition for both retail sales and transportation may be limited. The biggest fuel users, rural electric suppliers and schools, would be especially likely to realize savings because their bulk purchasing tends to promote competition. Individual consumers could realize meaningful savings in fuel costs, depending upon competition and other local market pressures.

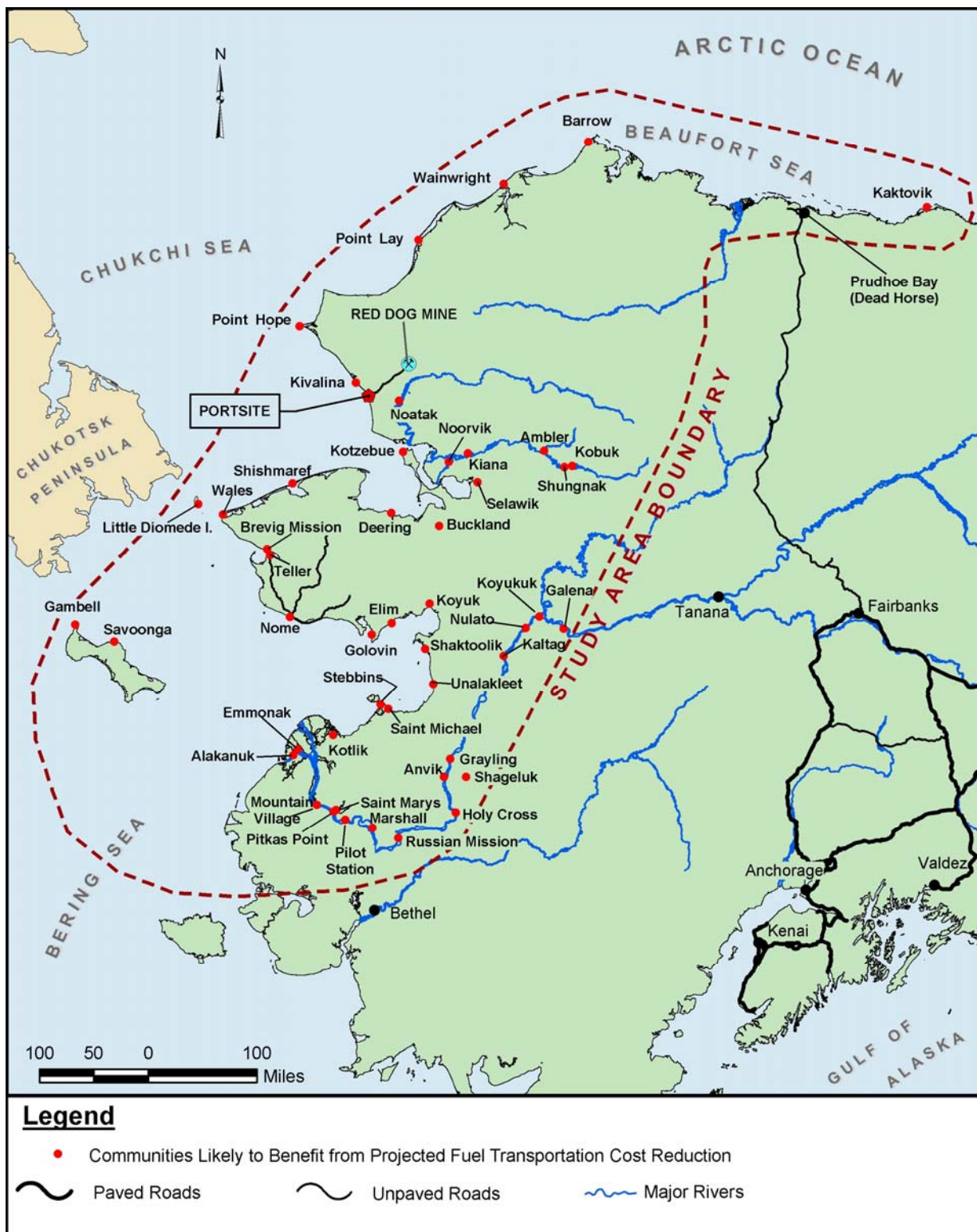


Figure 1-3. Communities likely to benefit from projected fuel transportation cost reduction.

1.3.3 Draft EIS Contents

An EIS is a reflection of the coordination and evaluation processes required by WRDA and NEPA regulations. This draft EIS is formatted in accordance with NEPA and Corps of Engineers implementation regulations. The sections and their major objectives are as follows:

Section 1 identifies the problems that are addressed by the draft EIS; the scope of the draft EIS in terms of the region, planning objectives, and consequences; and the principal resources of concern that were identified in the scoping process.

Section 2 identifies alternatives that were considered in the search for ways to meet project objectives. It explains why some alternatives were dropped after brief consideration and it provides more specific information about alternatives that would be most likely to be feasible and meet project objectives. It also compares environmental consequences of alternatives considered in detail.

Section 3 provides information about the resources of concern identified in Section 1.

Section 4 overlays the alternatives considered in detail in Section 2 with the resources of concern identified and discussed in Sections 1 and 3.

Other sections and appendixes identify the people who contributed to the EIS process and who participated in preparing this draft EIS; list other documents, studies, and data sources used in preparing the draft EIS; and provide relevant correspondence and analysis to support the main text of the draft EIS.

The draft EIS is constructed to reflect the study process. The studies began by identifying why action was needed, which led to development of alternatives. At the beginning of the studies, we identified resources and issues of concern, which defined the critical resources to be examined in Section 3. The information about alternatives in Section 2, matched with the information about important resources in Section 3, is the basis for the analysis of environmental consequences in Section 4.

1.3.4 Incorporating Traditional Knowledge in the Draft EIS

Information was collected from the people of Northwest Alaska, beginning with the earliest scoping meetings and continued through preparation of the draft EIS. Written accounts were used when they were available, but much of the traditional knowledge about the biology of Northwest Alaska came from the people of the region who gave of their time to add value to the study. We particularly relied on traditional knowledge related to resources that are best known to the hunters and fishers of the region. Information from the Northwest Arctic Borough, a cooperating agency in this draft EIS, was especially valuable. In most cases, information collected from scientific documents and research has tracked well with information from traditional knowledge. Where traditional knowledge appeared to differ from observations by scientists, we attempted to present relevant information from both sources.

1.3.5 Names of Animals, Plants, and Places Used in the Draft EIS

This draft EIS uses common names in the English language, rather than scientific or Iñupiaq names, as a matter of practicality. Many of the draft EIS readers know the Iñupiaq names, and many know the scientific names, but the common names in English are the most widely recognized by the audience that is likely to read the draft EIS. Using English common names also avoids or minimizes confusion about variations in usage of Iñupiaq names in different communities or by different individuals. As a guide for those interested, a table listing both Iñupiaq names most generally used in northwestern Alaska and common English names for many of the resources discussed in this draft EIS is in Appendix 8.

1.4 Scoping and Participation by Others

1.4.1 Cooperating Agencies

The Environmental Protection Agency (EPA) is a cooperating agency for the DeLong Mountain Terminal EIS. EPA was the lead agency in the original Red Dog Mine EIS and has expertise in ocean disposal of dredged material. The EPA, working with the Corps of Engineers, could eventually designate a Section 102 Ocean Disposal Site that would accept dredged materials from maintenance dredging for the DeLong Mountain Terminal project. However, material from initial dredging for construction and from the first maintenance dredging effort would likely be deposited at a single-use site using the Corps' Section 103 authority.

The National Park Service (NPS) is a cooperating agency because of their expertise in Cape Krusenstern National Monument resources (through which the DMTS road passes) and their status as a co-signer on the Red Dog Mine Road lease agreement.

By letter dated August 8, 2000, the Native Village of Kivalina IRA (Indian Reorganization Act) Council requested that the Corps recognize it as a cooperating agency. The letter stated that the council:

“...is the *only* agency with ‘special expertise’ regarding the value of subsistence hunting at the portsite to the Native people of Kivalina, and possesses unique knowledge about the animal life in the area, on- and off-shore.”

In accordance with guidance current at that time, the Alaska District declined to accept Kivalina as a cooperating agency. Changes in guidance in 2002 cleared the way for cooperating agency discussions with the Kivalina IRA Council and the recognized IRA Councils of Point Hope, Noatak, and Kotzebue. The Kivalina IRA expressed continuing interest in becoming a cooperating agency, but no agreement was ever reached about how they would participate in the study process or the EIS. The other IRA councils discussed cooperating agency possibilities but did not ask for that status.

The Northwest Arctic Borough (NAB) became a cooperating agency in the DMT EIS in an agreement signed on April 25, 2005. The agreement recognized the regulatory role of the NAB, their importance in representing the interests of the borough, and their extensive knowledge of the people, their culture, and the resources important to them. The NAB, along with the NANA Regional Corporation, has worked with and advised the Corps throughout the NEPA process and the preparation of this draft EIS.

1.4.2 Government to Government Consultation

The IRA councils or other federally recognized Native entities of Kivalina, Noatak, and Kotzebue were notified about the DMT studies by letter in 2000. They were invited to participate in Government-to-Government consultation as defined by Department of Defense (DoD) guidance for implementing Executive Order 13175 *Consultation and Coordination With Indian Tribal Governments*. The Kivalina IRA Council requested consultation, and the initial meeting to begin consultation was held in July 2000. A formal consultation meeting in October 2000 followed this initial meeting. Other Native governments at Noatak, Point Hope, and Kotzebue did not request consultation.

Since the initial consultation and offer of consultation, the Corps has provided information in response to representatives from the Kivalina IRA Council and other Native governments, but has not been asked to conduct formal consultation within the scope of DoD guidance. The Kivalina IRA Council has consulted extensively with the U.S. EPA regarding a variety of subjects, including the DMT EIS, since 2000, but has not asked the Corps to participate in those consultations.

1.4.3 Public Scoping

Notice of intent to prepare an environmental impact statement for navigation improvements at DeLong Mountain Terminal was published in the Federal Register on March 10, 2000.

Corps representatives attended meetings in Kivalina, Noatak, and Kotzebue in January 2000, before the notice was published, to give early notification to concerned residents. Scoping meetings were held in Kivalina, Noatak, and Kotzebue in late March 2000, in Point Hope on May 24 and 25, 2000, and again in Kivalina on July 19, 2000. Issues identified at each meeting were recorded on “flipchart” paper and were verified with each person who commented. Comments were retyped after the meeting and were sent to everyone who signed in with an address at each meeting. A summary of work in progress accompanied the July 19, 2000, meeting notes. Other interested persons also received copies of the comments. Additional comments were solicited with each mail-out of the scoping comments. All comments received during those meetings are presented in Appendix 9 as part of this draft EIS.

The IRA councils or other Federally recognized Native entities of Kivalina, Noatak, and Kotzebue were notified by letter in May 2002 that the Corps intended to release a preliminary draft of part of the “Existing Environment” section of the draft EIS to share information that had been collected and to open discussions about affected resources. The letter asked for input about the best way to involve interested people from the communities in those discussions. In July 2002, the partial drafts were mailed to everyone who attended the scoping meetings or who had requested to be on the mailing list. The accompanying letter contained an update of study progress and preliminary planning information and it requested comments and additional information from the readers.

Scoping has been a continuing collection of information and identification of issues throughout the DEIS process. Scoping comments collected throughout the process were sorted into seven general categories that were used to define issues and concerns for the study process and the draft EIS. Those categories and the principal concerns associated with each are as follows:

The EIS and Associated Processes.

Concern: Will the EIS present local concerns and properly involve local residents?

Concern: Will the EIS present enough and accurate information about the resources people are concerned about in NW Alaska?

Comment: One or more tribes in NW Alaska should be cooperating agencies in the EIS.

Concern: How broad should the scope of the EIS be? Should the Federal decision be restricted to the alternatives at Portsite, or should it deal with broader regional transportation and mining issues?

Comment: What is the environmental baseline for the EIS? It should use pre-Red Dog data to help understand cumulative effects.

Fish, Wildlife and Their Habitat

Concern: What important marine biological resources use the areas that would be developed for a Portsite project? Why? How important are those areas to local and regional abundance of important species?

The following marine biological resources were identified as resources of particular concern to Northwest Alaska coastal users:

Bearded seal	Potential commercial species
Beluga	Food species of fish eaten by beluga, seals, salmon and char
Bowhead whale	Shrimp
Ringed seal	Crab (including king crab and crab species eaten by other animals)
Char	Plankton and other organisms important in the food chain
Pacific salmon.	

Activities and Structures that Might Affect Important Resources

Noise and presence, including:

- Shipping
- Loading
- Tug operation
- On-land activities
- Maintenance of trestle, loader, and other in-water facilities
- Aircraft to and from the site
- Dredging for construction and maintenance

Dredged material disposal:

- Turbidity and effects on marine life
- Contaminant release
- Habitat and organisms covered by disposal

Dredging

- Noise and activity
- Turbidity
- Contaminant release
- Habitat destruction or modification

Effects of project features on marine processes and organisms, including:

- Shadow and presence effects on mammal and fish movement
- Trestle piling effects on ice movement and leads
- Dredged channel effects on local currents and water movement
- Dredged channel effects on littoral drift, long-shore transport, and shoreline erosion
- Dredged channel effects on movement of fish, marine mammals, and other organisms.

Effects of operations and shipping on marine resources:

- Noise
- Presence
- Potential for importation of exotic species in ballast water
- Potential for contaminant loss during loading and hauling
- Potential for major spill

Subsistence Harvests and Practices

Concern: Regional mining development (including a project at Portsie and cumulative and induced development) could adversely affect the ability of people to get to and harvest subsistence plants and animals.

Concern: Regional mining development (including a project at Portsie and cumulative and induced development) could adversely impact plants and animals important to the ecosystem and to subsistence.

Concern: May have to go farther to reach marine mammals.

Concern: May be forced to navigate farther off shore in rough weather to go around the loading facilities.

Concern: Would potential losses of subsistence opportunities be mitigated? How?

Concern: Late shipping might affect autumn whaling in villages south of Portsie.

Potential Contamination

Concern: That Red Dog Mine might be releasing contaminants into air, water, subsistence resources, and eventually into people of the region.

Concern: That release of contaminants might increase with more throughput of concentrate and a longer conveyor.

Concern: More shipping capacity at Ports site might increase mining and therefore potential for contamination.

Concern: Toxic effects of zinc and trace metals as well as lead.

Concern: Potential for a marine release of spilled concentrate.

Concern: Is there adequate contingency planning for major marine spills of concentrate.

Concern: That cumulative effects of outside contamination along with contamination from regional mining are causing sickness in the villages of NW Alaska.

Concern: That expansion of the Ports site facility would open the region to more mining and therefore more potential for contamination.

Regional Development and Economic Opportunity

Concern: Traditional and subsistence ways could be lost if region develops.

Comment: People in NW Alaska are not satisfied with how they are represented in economic and resource allocation decisions that affect them.

Comment: Region needs careful development that will be good for future generations.

Comment: Most people in NW Alaska want the economic advantages brought by mining, but many worry about the effects.

Concern: Shipping effects on marine animals and potential for shipping to increase with a new Ports site terminal.

Concern: That further development of Ports site would lead to more regional development and changes in traditional lifestyle, erosion of values, and other undesirable change.

Concern: A regional transportation hub at Ports site might affect Kotzebue by taking away business.

Alternatives

Comment: Site selection should be reviewed; other sites should be considered.

Comment: Alternative transportation routes should be considered to remove concentrate without shipping on the ocean.

Comment: Consider dredging channel to existing facility.

Comment: Consider building a cleaner loading system to lessen losses of concentrate.

Comment: Consider connecting Kivalina and Noatak to Ports site by road.

Concern: How much area of bottom would be dredged?

Concern: How much area of bottom would be covered by disposed material?

Concern: How far would bottom material from dredging and disposal of dredged material drift with the current?

Concern: How much turbidity would there be from dredging and disposal and how far would those effects be seen?

1.4.4 Other Public and Government Participation

Information about studies and activities related to the DMT EIS has been provided to interested Government entities. Since 2003, regional and local government entities, including the Northwest Arctic Borough, North Slope Borough, regional for-profit and non-profit corporations, Native IRA councils, and other interested parties have participated in meetings about the DMT EIS and feasibility report and other activities related to those studies. Information has been provided as requested at those meetings.

1.5 Relationship to Other Planning

Plans for future development in Northwest Alaska are primarily related to mining, road construction, airport development, port development, and community expansion and relocation. Potential for development is discussed in Sections 3 and 4 of this draft EIS.

1.5.1 Mining

Northwest Alaska has extensive bodies of ore that might be developed if world metal prices were favorable and extensive coal deposits north of the DMTS could someday be mined economically. Those resources are identified in figure 1-4. There are no firm plans to develop any new mines for ore or coal, although those resources generally are considered in long-term regional planning for Northwest Alaska. This indicates that evaluation of alternatives for navigation improvements at Portsite should consider the potential for the project to adapt or expand to accommodate future mining or other development in the region.

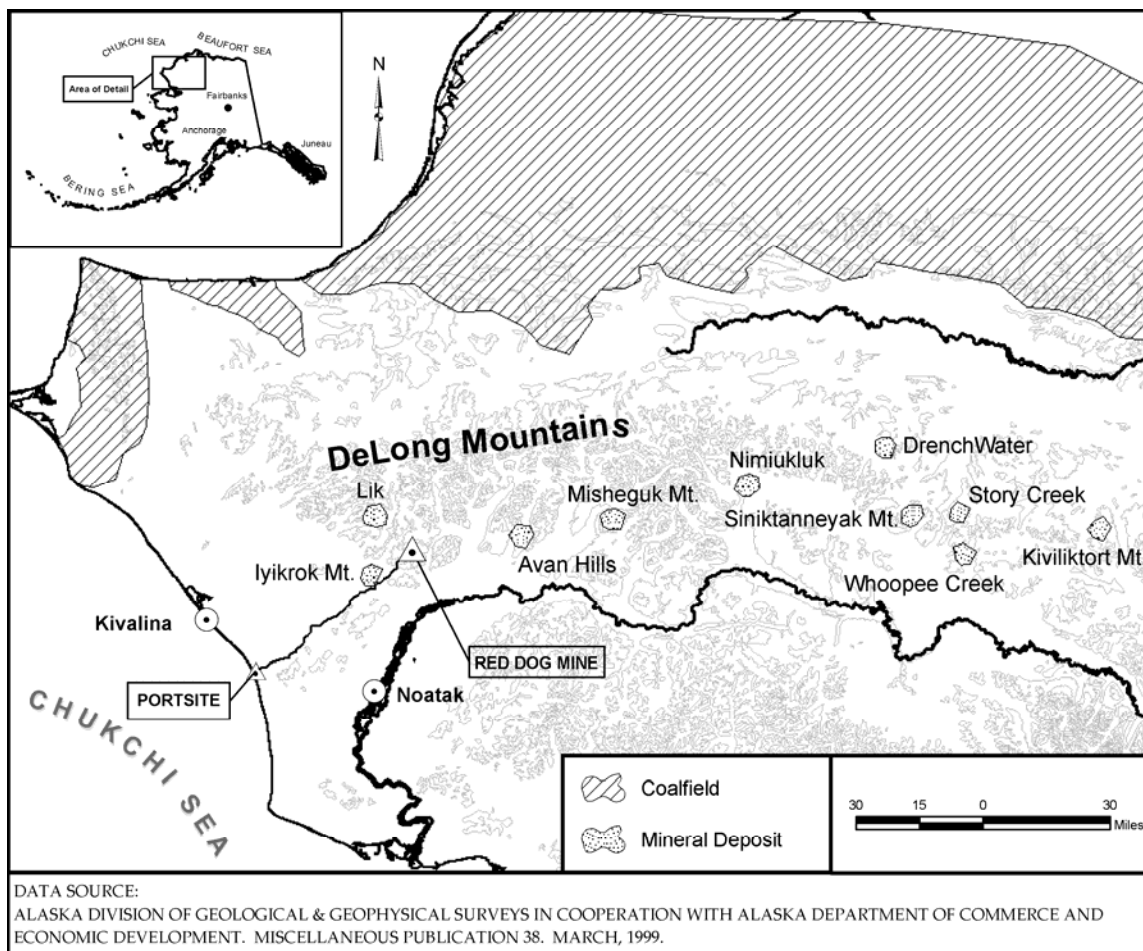


Figure 1-4. Coal fields and mineral deposits in Northwestern Alaska.

1.5.2 Transportation

The Alaska Department of Transportation is engaged in ongoing studies of transportation needs, including road and airport improvements in northwestern Alaska. There is interest in a spur road from the existing DMTS road to the community of Noatak and expansion of the Noatak airfield to meet the needs of both the community and the existing mining operations. Any other road construction in northwestern Alaska north of the Noatak River would be likely to tie into the DMTS road system. Evaluation of alternatives at Ports site should consider whether they could be adapted to support future transportation development.

1.5.3 Community Expansion and Relocation

Planning for community expansion and relocation does not appear to be directly related to potential activities at Ports site.

1.6 Project and Study Objectives

As the agencies and the public participated in scoping for this study and as information was collected, the following objectives were identified:

Reduce fuel transportation costs in western and northwestern Alaska by providing facilities that can receive fuel from tanker ships.

Provide facilities to transport ore concentrate more efficiently, safely, and at lower cost than existing shipping operations.

Construct a project that is adaptable to future uses. New loading and fueling facilities should be designed so they can be used, to the extent feasible, by as broad a range of future users as can be accommodated. Facilities adaptable to future needs may not produce accountable economic benefits, but may better serve the people of the region and the people who use them in the future. Potential for flexibility and adaptability should be considered in project evaluation.

Avoid or minimize impacts to biological resources.

Avoid or minimize impacts to cultural and other human resources.

Support employment and economic growth consistent with regional planning objectives for Northwest Alaska.

Mitigate project environmental and social impacts to the extent justifiable, in accordance with Corps of Engineers planning guidance and regulations.